

INTERNATIONAL PRELIMINARY EXAMINATION REPORT 14

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 102358/PRS	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/IB00/00962	International filing date (day/month/year) 03/07/2000	Priority date (day/month/year) 02/07/1999
International Patent Classification (IPC) or national classification and IPC H04L1/16		
Applicant NOKIA NETWORKS OY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 6 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 01/02/2001	Date of completion of this report 20.09.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Haas, H Telephone No. +49 89 2399 8800 

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International application No. PCT/IB00/00962

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-14 as originally filed

Claims, No.:

1-22 as originally filed

Drawings, sheets:

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

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☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 21,22.

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 21,22 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos. .

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims 1-20

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	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-20
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-20
	No:	Claims	

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

The following documents are cited:

- D1: US-A-5 245 616 (OLSON GENE H) 14 September 1993 (1993-09-14)
- D2: US-A-4 975 952 (MABEY PETER J ET AL) 4 December 1990 (1990-12-04)
- D3: US-A-4 841 526 (WILSON JON C ET AL) 20 June 1989 (1989-06-20)

SECTION III

Independent claims 21 and 22 merely contain a reference to the drawing. The scope of the claims is therefore unclear (Article 6, PCT)

SECTION V

The subject-matter of the international application relates to a method (claim 1) and a receiver (claim 13) for generating acknowledgement messages to provide an indication of erroneously received datagrams.

The nearest state of the art is described in documents D1 and D2. Both documents employ a bitmap system, i.e. an acknowledgement message contains for each received block of data a bit indicating if the packet has to be retransmitted or not.

Furthermore D3 discloses the generation of an acknowledgement message for each received data frame.

To solve the problem of reducing the amount of bandwidth needed for acknowledgement, according to claims 1 and 13 of the international application an acknowledgement message contains a plurality of data units, wherein each data unit comprises a status bit and an indication of the distance between incorrectly received datagrams.

This results in a data structure that could be looked upon as some kind of compressed bitmap acknowledgement.

This subject-matter is not rendered obvious, alone or in combination, by the documents of the International Search Report. Inventive activity and novelty are therefore acknowledged (Art. 33 (3) and (2) PCT).

The same applies to dependent claims 2 to 12 and 14 to 20.

As the subject-matter of the application relates to communication networks, the criteria of industrial applicability is met (Art. 33 (4) PCT).

SECTION VII

The independent claims are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art being placed in a preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).

The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1, D2 and D3 are not mentioned in the description, nor are these documents identified therein.

Contradictory to Rule 6.2(a) PCT, claims 21 and 22 contain references to the drawing.

SECTION VIII

The last paragraph of the description refers to "the scope of the invention" and indicates that the subject-matter for which protection is sought could differ from the subject-matter of the claims, thereby rendering the scope of the claims unclear (Article 6 PCT).